

ACMLP - Distance Learning Course 4th edition

Motor Learning and Performance Test questions

It is suggested to read the questions below and those in the text **BEFORE** you read each chapter. Provide answers in the space below the questions to eliminate restating the question.

1. Franklin M Henry is also known as the “father of motor skills research T-F
2. At what institution did Frank Henry perform most of his research?
3. One of his most important works was in the area of _____ .
4. When defining a motor skill the text suggests that motor skills can be conceptualized in 2 major ways. Describe the 2 sub-categories.
5. Describe the task organization continuum and give 3 examples of each related to Force training.
6. Why is the term psycho-motor skill or perceptual-motor skill applied to the above tasks?
7. Explain the concept of a motor-cognitive skill continuum.
8. Give examples of skills on both extremes and the middle point on the above continuum.
9. When analyzing a skill for instruction, you should identify what 2 major components about the skill?
10. Gentile’s 2-dimensional classification system considers what 2 elements.

11. Diagram the 2 dimensional grid of Gentile's classification system.
12. Explain implicit learning.
13. The most amount of "problem solving" is in which stage of learning?
14. Describe the Motor learning continuum and the associated motor performance characteristics.
15. At which stage of motor learning is the learner able to detect and correct errors that might occur in their performance?
16. Relate the phenomenon of "choking" during performance to the intrinsic and extrinsic control process.
17. Define the basis or premise on which Problem/Situation Based Learning is based.
18. Arthur Combs had what to say about effective problem solving?
19. Components of a movement skill are typically broken down into 3 categories.
20. Give 2 reasons why the book's authors chose to discuss motor performance concepts prior to motor learning concepts.
21. The last 2 paragraphs on page 21 state what?

22. How does the information contained on page 27 in the red “box” relate to the “street”?
23. Stage one of information processing is what?
24. Stage two of information processing is what?
25. Stage 3 of information processing is what?
26. Reaction time is defined as what?
27. Apply the information on page 34-35 to line officer and relate it to Hick’s law.
28. Discuss figure 2.5 and relate it to “the street” be sure to note which present the biggest challenge for LEO’s/CO’s and which you can influence.
29. Describe the “inverted-U” (Yerkes-Dodson) principle.
30. Trait anxiety is what?
31. How might/should the above phenomenon relate to hiring practices?
32. How might training affect the “zone of optimal functioning”?

33. Describe perceptual narrowing.
34. Describe the cue utilization hypothesis.
35. Relate the muscles-to-mind to performance on-the-job and training.
36. Mind-to-muscle skills are used for what?
37. Describe how you (probably) already utilize the above in training or on the job.
38. Parallel processing is what?
39. Controlled processing is what?
40. Automated processing is what?
41. The Stroop effect is what?
42. How can the above be used in firearms training? C/DT training?
43. List and define the 3 memory systems outline in the text.

44. What game is being played on page 62?
45. Define and list 2 examples of exteroception.
46. Define and list 3 examples of interoception.
47. Define proprioception.
48. Define kinesthesia.
49. Describe the vestibular system.
50. Describe muscle spindles and their function.
51. Describe Golgi tendon organs and their function.
52. List 2 types of information that cutaneous receptors can deliver.
53. In the article “why can’t this man feel whether or not he’s standing up” how could he use the above sense to “cheat” on experimental tests? (find the article in your Level One Manual)
54. Ostensibly why is it you can’t tickle yourself?
55. Describe the nature of a reflex as noted in the text.

56. Describe an M 1 response.
57. describe an M 2 response
58. describe an M 3 response
59. What type response is the classical “knee jerk” response?
60. Is an M 2 response subject to Hick’s Law?
61. How might you train to take advantage of the M 2 response?
62. Describe a triggered reaction. Give an example in DT where you may utilize this reaction such as the “flinch response” that is incorporated into the Dive Defense movement taught by the CJTC?
63. Describe the type of training you employ to develop this in a level one class.
64. Describe the Bliss-Boder hypothesis as it relates to information processing.
65. Describe the role of focal vision in movement control.
66. Describe the role of ambient vision in movement control.
67. The “quiet eye ”refers to what phenomenon?
68. Summarize the findings in the Bridgman et. al. experiments.

69. Optical Flow provides what 5 types of information?

70. Visual proprioception is described as what?

71. Do successful batters really keep their eye on the ball?

72. Visual dominance is described as what in the text?

----- Chapter 4 -----

73. Identify whether flow training and tactile sensitivity use an open or closed loop control mechanism.

74. List 5 examples of both open and closed loop activities in the C/DT area.

75. Describe the concept of “degrees of freedom” within a movement.

76. Describe a typical skill seen in C/DT or firearms training where this phenomenon is easily observable.

77. Describe a typical activity in Police training that the phenomenon on the top of page 122 would be seen.

78. Can the stage of learning affect DOF phenomenon? If so how?

79. Develop and describe a connection between “surface features” noted on 128 and the concept of contiguous conditioning.

80. Describe the “dynamical perspective” with regard to control of complex movements.
81. Describe the” general motor program” theory.
82. The “fingerprint” of a movement or action refers to what feature of movement?
83. Define a generalized motor program. Be sure to utilize the “phonograph record” analogy to illustrate your explanation.
84. M1 and M2 responses can have what effect on movement variability?
85. How might the above be important from an evidentiary perspective with regard to an excessive force complaint?
86. Should performers emphasize speed or accuracy when attempting a targeted movement?
87. Is your answer consistent with the commonly used phrase of “smooth is fast” or “slow for accuracy”?
88. Explain why or why not?
89. Do experienced batters use their vision to control their movements?
90. What is the value of swinging a weighted bat prior to the actual movement?

91. Individual differences are defined as _____, _____ differences among people that contribute to differences in task performance.
92. Research on individual differences is primarily concerned with what 2 things?
93. Define abilities as utilized by researchers in the field of human performance.
94. Researchers have identified _____ to _____ cognitive and motor abilities.
95. Comment on the concept of general motor ability.
96. Frank Henry was a proponent of the above theory: T or F?
97. Ed Fleishman et. al. research what subject in what population?
98. List the 2 major categories that Fleishman utilized.
99. How did Henry's and Fleishman's hypotheses differ?
100. Discuss one major factor that motor skill instructors need to consider in an attempt to predict future performance of beginners.
101. Develop a flowchart similar to the one on page 181 but use a DT skill for the basis of your chart.

102. Describe the acronym CARS and what it denotes.
103. Define Generalization in the context of motor learning.
104. Develop an analogous fable similar to the “woodchopper’s ball” that is based on LEO/CO PMS that illustrates the idea of generalization. You may use drill concepts as part of your explanation.
105. List and define the 3 categories/class of elements involved with motor performance.
106. The principle of specificity of learning is what?
107. List the 3 stages of motor learning and compare to those used in the Criminal Justice Training Commission Level One manual.
108. What are other names for these stages?
109. Crossman 1959 investigations illustrated what in cigar workers?
110. How does this compare to the “old 3-5 K repetitions” statement?
111. In the “measuring aiming movements” discussion how does this relate to firearms “qualifications?”
112. Is CE or VE already taken into account on a typical target scoring method?

113. On page 217 reformat Exercise #1 into a DT or firearms skill related question – and then answer it!

4th Edition ----- Chapter 8 -----

114. Explain the second paragraph on 221 in the context of an in-service motor-skill class.
115. How can giving BOTH verbal and visual information simultaneously be counter productive?
116. List the 2 dimensions identified by Nideffer that people have the capability to control.
117. Describe External informational focus.
118. Describe internal informational focus.
119. Describe broad informational focus.
120. Describe narrow informational focus.
121. Which of the above informational focus has been shown to be superior for beginning learners?
122. Describe the difference between anxiety and arousal.
123. Describe how “process goals” could be used in IRS type drills.
124. Structuring practice (massed vs. distributed) can have an effect a single session or between several sessions. True or False

125. The results of the 1978 Baddeley and Longman postal worker study demonstrated what?
126. Discuss the concept of limited attentional capacity.
127. Describe “modeling” as it applies to motor learning.
128. Describe guidance.
129. List 3 ways that guidance may have an effect on motor learning.
130. The classic 1959 experiment by Annett involved what?
131. The results inferred what about practice structure?
132. The information in the red box on page 233 relates to what section in the 2071 manual?
133. Simulators such as FATS are only worthwhile when they _____.
134. Describe *PART* practice as it applies to teaching motor skills.
135. Define the 3 types of part practice outlined in chapter 8 and give an example of each as it applies to motor skill training in the use of physical force.
136. What 3 questions should the instructor him/herself when incorporating part practice?

137. Part practice works best when the tasks are what category; and when part practice will not influence what?
138. The mastery of the sub-skills or parts of a _____ skill does no guarantee effective performance of the WHOLE skill unless what?
139. What category or motor skill is the least to benefit from part-practice?
140. Argue FOR the use of slow-motion training of motor skills
141. Argue AGAINST the use of slow-motion practice.
142. Define error detection capability.
143. For learners to improve their error detection capability they must become what...?
144. Should the teacher instruct the student to attend to movement produced feedback *during* the movement?
145. Why or why not?
146. Make a DT analogy for each of the 3 red text boxes on page 243, 244, and 245.
147. Define and contrast mental practice with mental imagery.

148. Where and what is the effect of mental practice on the rate of learning motor skills?
149. Describe the procedure for mental imagery as outlined in the book.
150. According to recent research mental imagery is most likely to benefit from mental imagery?
151. Rephrased questions 1-8 into a DT/firearms/driving paradigm.

4th Edition -----Chapter 9 -----

152. Define contextual interference effect.
153. Give specific examples of how this “effect” is manifest in DT training, at the academy and in-service.
154. Explain the elaboration hypothesis with respect the above “effect”.
155. The Shea and Morgan experiments dealt with what phenomenon?
156. The Action-plan–reconstruction hypothesis (ala Lee & Magill) is also called what?
157. What type of practice structure is likely to give the performer a false sense of accomplishment with a motor skill?
158. What is the value of having a wide variety of golf clubs?

159. What are some of the considerations when deciding how soon to introduce random practice?
160. What stage of motor learning is the above point likely to be?
161. When arranging random skills is it better to place similar or dissimilar skills together/juxtaposed?
162. A particular strength of varied practice is that it allows learners to develop what?
163. Discuss the components of varied or constant practice versus random or blocked practice.
164. What has Lee, Magill, & Weeks' research said about combining these variables in practice?
165. How does the above information compare to Christina, et.al. research?
166. Consistent and varied mapping are synonymous to what other terms?

4th Edition -----Chapter 10 TEN -----

167. Define interoception.
168. Define exteroception.
169. Define extrinsic feedback.
170. Define intrinsic feedback.
171. Kinematic feedback is synonymous with what?

172. List the three types of reinforcement outlined on page 292.
173. Elaborate on the information contained in the red box on 294 and differentiate reinforcement from feedback.
174. Motivation is assumed to be part of what theory?
175. For retention of complex PMS feedback should be given when the student asks for it?
176. Define program feedback.
177. Define parameter feedback.
178. Define descriptive feedback.
179. Define prescriptive feedback.
180. Define summary feedback.
181. Define attentional cueing.
182. Define bandwidth feedback.
183. Define faded feedback.

184. Describe delayed bandwidth feedback and how it may be connected to recognition memory.
185. List the feedback methods that have a temporal component as one of its defining qualities.
186. List the feedback methods that have an external component as one of its defining qualities.
187. List the feedback methods that have an internal component as one of its defining qualities.
188. Develop a matrix depicting the various types of feedback methods and their commonalities and differences.
189. Comment intelligently on the feedback frequency needed for complex motor skills; give a DT example identifying a skill with similar complexity to the one seen in Figure 8.4.
190. Comment on “a strange golf practice” page 316, and then develop the same regimen for DT, i.e. while on a training run you stop and shadow box.

----- Chapter 11 -----

191. Read the case studies and develop a similar situation/story for a police motor skill situation i.e. firearms, driving, C/DT. Be sure to incorporate the checklists provided in the book.
192. Outline the differences in group instruction versus individual instruction and list the major problems and issues surrounding this instructional paradigm